

ABSTRACT

FOI 685260

The present invention relates to superconductive filter technology. According to the arrangement of the superconductive filter (1), a columnar resonating member (23) having a superconductive material formed on the surface thereof is attached at one of its ends thereof to an inner wall (22) of a filter housing (21) so that a space is interposed between the columnar resonating member and each of connectors (27a, 27b) which are connectable to a signal input/output cables (5a, 5b), respectively. According to this arrangement, heat conduction from the outside can be suppressed as far as possible, and the superconductive condition can be created with stability, with the result that a stable filtering characteristic can be created. Further, the superconductive filter according to the present invention will become excellent in power withstand performance, and hence even if the number of stages of filters is increased for attaining a steep cutoff characteristic, the loss deriving from the increased number of stages can be suppressed to the minimum level.